



US006397764B1

(12) **United States Patent**  
Massey

(10) **Patent No.:** US 6,397,764 B1  
(45) **Date of Patent:** Jun. 4, 2002

(54) **ANIMAL CARCASS INCINERATOR**

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(\*) **Notice:** Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) **Appl. No.:** 09/951,810

(22) **Filed:** Sep. 14, 2001

(51) **Int. Cl.<sup>7</sup>** ..... F23G 1/00; F23M 5/00

(52) **U.S. Cl.** ..... 110/194; 110/248; 110/336

(58) **Field of Search** ..... 110/194, 208, 110/209, 248, 310, 311, 312, 314, 336, 322, 323; 126/79, 69, 75; 432/249

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(57) **ABSTRACT**

An animal carcass incinerator designed to subject the entire external surface of the biomass material simultaneously to flame. The flame front burns inward toward the core of the material, greatly accelerating the burning process. Complete flame coverage of the biomass material is achieved by carefully shaping the internal surfaces of the incinerator. Burning gases are injected into a lower flame chamber. This lower flame chamber is bounded on its upper side by a grate, and on its remaining sides by the walls of the incinerator. Above the grate is a biomass chamber, where the animal carcasses or similar waste are deposited for incineration. The incinerator walls are lined with refractory insulating materials which incorporate a series of vertical flame channels. Likewise, the grate incorporates a series of vertical open channels. These channels are separated by raised ribs, which prevent the biomass materials from closing off the channels. The result is that even when the incinerator is jammed full of biomass materials, the burner flames still spread evenly around the entire external surface of the materials. A supplemental blower injects air to create a swirling pattern of flame within the biomass chamber.

5 Claims, 8 Drawing Sheets

